

## ABSTRACT

The present invention relates to a preamplifier suitable for use with Electret Condenser Microphones such as used within telecommunication equipment. More particularly the invention relates to a preamplifier specially suited for the demands to such a  
5 preamplifier within telecommunication equipment: low input capacitance, gain and a combined terminal for output and supply voltage, thus making the preamplifier suitable for two terminal microphone assemblies. These features are obtained with a two stage amplifier with a first stage optimised for low input capacitance and the second stage being able to provide gain. The preamplifier may be implemented using an  
10 ASIC, thus making the preamplifier suitable for applications with very limited space available, such as for integration within microphone assemblies.